US EPA RECORDS CENTER REGION 5
466401

Monthly Oversight Report 53
ACS NPL Site
Griffith, Indiana
May 7, 2005 - June 3, 2005

BLACK & VEATCH

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Black & Veatch Special Projects Corp.

USEPA/RAC VII
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526
BVSPC File C.3
June 14, 2005

Mr. Kevin Adler
U.S. Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report
No. 53 for May 2005

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 53 for May 2005 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbelllm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.
Site Manager

Enclosure

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Monthly Oversight Summary Report No. 53
ACS Superfund Site WA57, 46526.238

Reporting Period: Month of May (May 7 - June 3, 2005)
BVSPC O/S Dates: May 10 & 20 and June 1 & 3, 2005 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Indiana Department of Environmental Management	1	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
PSA Environmental	1	Geoprobe Contractor
Austgen	1	General Contractor
Microbac	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza and PSA Environmental conducted the post-application sampling following the second full-scale round of chemical oxidation injections of modified Fenton's reagent in the South Area plume.
- Montgomery Watson Harza conducted the 24-hour indoor air sampling in the basement of the residence at 1002 Reder Road.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held the monthly operation status meetings on June 3.

Activities Performed:

Montgomery Watson Harza (MWH) reported (June 3) that the groundwater treatment plant (GWTP) was operational 97% of the time (30 of the 31 days) in May, processing about 791,000 gallons of groundwater at average rates of 25 to 40 gpm. MWH reported that water was being pumped to the GWTP from all trench and well sources during May.

MWH reported that the GWTP did not operate on May 9 when the granular activated carbon (GAC) was replaced. The GWTP operated in recirculation mode for 2 days until the pH stabilized; thereafter, normal discharge to the wetlands was resumed. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH reported that Fliteway was onsite on May 19 to install a larger fan to ventilate the noise-suppression housing on blower ME102; however, the new fan was the wrong size and was not installed. Fliteway will obtain the correct fan and install it at a later date. MWH also reported that a seal on blower ME102 failed and that blower ME103 is now supplying air to the aeration tank. A replacement seal has been ordered for ME102.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems and the OFCA and SBPA air sparge systems.

MWH reported that thermox 1 only operated for 3 of the 31 days in May because of mechanical problems with the main gas regulator (repaired), spray nozzles (cleaned), and recirculation pump motor (ordered replacement). Thermox 1 processed 1,000 cfm of vapors from the ONCA SBPA ISVE system, collecting vapors from 23 (of 46) ISVE wells. Because of the limited operation, no performance samples were collected from thermox 1 during May.

MWH reported that it inspected the new coating on the interior of the thermox 1 scrubber while the unit was shut down and noted some deterioration of the coating near the influent pipe. MWH reported that the deterioration did not affect the functionality of the unit, but it will continue to monitor the condition of the coating.

MWH also reported that thermox 2 processed 2,000 cfm of vapors from the OFCA ISVE system, collecting vapors from 40 (increased from 28 in April) of the 42 OFCA ISVE wells and aeration tank T102. Thermox 2 was operational 25 out of 31 days in May (81% of the time); it was down for 6 days to replace fouled packing material in the scrubber. MWH plans to clean the fouled packing materials and store it for future use.

MWH reported that operation of the GWTP continued while thermox 1 and 2 were out of service by routing the vapors from aeration tank T102 through the catalytic oxidizer.

Following the Global inspection of thermox 2 during the last reporting period, MWH reported that it had satisfactorily resumed operation of both OFCA blowers without causing excessive temperatures in the heat exchanger for thermox 2. MWH also reported that it had increased the operating temperature of thermox 2 from 1450 °F to 1500 °F to compensate for the five damaged tubes in the heat exchanger.

MWH reported that it pumped 36.6 and 48 gallons of product from five ISVE wells in the SBPA on May 19 and June 2, respectively. The product was transferred to the oil holding tank T6 in the GWTP. MWH reported that it attempted to pump product from wells SVE61 and SVE65, but found the product to be

highly viscous and non-pumpable. MWH will evaluate alternate methods to remove the viscous product from these wells.

MWH reported that it inspected all 21 SBPA dual-phase extraction (DPE) well pumps following the failure of the check valve on SVE46 in the previous reporting period. MWH reported that 14 of the DPE well pumps were operational, but that reduced functionality was observed in the remaining seven. These non-functioning pumps were removed from the wells for repair or replacement and are currently stored in the sludge roll-off box in the GWTP. MWH reported that the new or repaired pumps will be reinstalled with secondary check valves at all DPE well locations. MWH also reported revising the control logic such that DPE well pumps will shut off if adequate flow is not detected in the DPE well headers.

MWH reported that ACS had not reported a recurrence of odors in its break room on the SBPA.

MWH conducted the post-application sampling event following the second full-scale round of In-Situ Chemical Oxidation (ISCO) injections of modified Fenton's reagent in the off-site South Area smear zone plume near the intersection of Colfax Avenue and Reder Road. On May 31, MWH sampled groundwater from the existing temporary wells in the application area. PSA Environmental mobilized to the site on June 1 and advanced geoprobe holes to collect soil and groundwater samples from 10 locations in the application area. Post-application sampling was completed on June 3 and PSA demobilized from the site.

MWH conducted indoor air sampling at the residence at 1002 Reder Road on June 2-3. Two summa canisters were installed in the basement of the residence; a third cannister was placed outside and upwind of the house. The air samples were collected for a 24-hour period and shipped to the laboratory for analysis.

MWH conducted the May operation & maintenance (O&M) status meeting at the site on June 3. BVSPC attended this meeting.

Because of the lack of field activity this month, no weekly reports are attached. Weekly reports will be prepared in the future if there are sufficient field activities to warrant such reporting. However, correspondence, log book notes, and photographs of the daily activities are attached. BVSPC conducted oversight of the field activities on May 10 and 20 and June 1 and 3.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- Global Technologies to provide its report regarding the inspection of thermox 2.
- MWH to conduct the Phase 2 lower aquifer investigation beginning June 20.
- Next O&M meeting will occur at MWH's Chicago office at 10 AM on July 1.

- Third round of ISCO injections tentatively scheduled for late June / early July.

Signature: Larry Campbell Date: June 14, 2005

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SITE STATUS MEETING MINUTES FOR JUNE 3, 2005 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Friday, June 3, 2005

MEETING TIME: 10:00

MEETING LOCATION: MWH Chicago Office

ATTENDEES:
Larry Campbell – Black & Veatch
Prabhakar Kasarabada – IDEM
Todd Lewis – MWH (by phone)
Peter Vagt – MWH (by phone)
Chris Daly – MWH (by phone)
Lee Orosz – MWH
Chad Smith – MWH

TOPICS:

SITE STATUS

Health and Safety Summary

There have been no health and safety issues since the last meeting on May 6th. Todd Lewis announced that the ACS Team has received the Ace Award for safety. This is a prestigious, internal MWH award awarded to the company's safest sites each year

Chemical Oxidation Treatment Status

MWH is currently conducting the post-application sampling event for the second full-scale chemical oxidation treatment. The sampling event began on May 31, 2005, and will be completed on June 3, 2005. Soil and groundwater samples are being collected from 12 locations throughout the treatment area and being laboratory analyzed for volatile organic compounds (VOCs), diesel and gasoline range organics (DRO and GRO), total organic carbon (TOC), and pH. The sampling depth intervals and parameters are consistent with previous events to allow for comparison of results. There have been no health and safety issues related to the post-application sampling event.

Groundwater Treatment Plant (GWTP) Status

Treatment rate through the GWTP varied between 25-40 gallons per minute (gpm) during May. The approximate total volume of water treated was 791,000 gallons. A carbon changeout was performed on May 9. Blower ME-102 (supply to the aeration tank) had a failure in a seal. A new seal has been ordered and will be installed early next week. In the meantime, the other blower (ME-103) is supplying the air to the aeration tank.

Off Site Area/SBPA ISVE Systems

The SBPA ISVE System was operated only intermittently during May due to various maintenance actions performed on Thermal Oxidizer 1 (TOX1). TOX1 was brought offline to service the main gas regulator and to unplug the spray nozzles. During an inspection of the unit, the interior scrubber coating was noted to be deteriorating near the scrubber influent pipe. The deterioration does not affect operation of the scrubber but MWH will continue the monitor this situation. On May 23, the recirculation pump motor failed. A new pump was ordered and should be during the week of June 13th.

The Off-Site ISVE System was operational 81 percent of the time during May. It was shut down for six days for maintenance activities associated with Thermal Oxidizer 2 (TOX2). The system was shut down during the Global inspection of the unit (performed from May 3 to May 5). On May 25, TOX1 was shut down due to debris in the recirculation pump. Similar debris was found in the scrubber packing. The packing was removed and will be cleaned prior to reinstallation. A new pump will be installed. The existing pump is still functional allowing TOX2 to operate, however, its capacity has apparently been reduced.

Product removal activities have been performed weekly at five ISVE well locations in the SBPA. During the June 2 removal activity, product was also removed from SVE-61. This well is a dual-phase well that has had limited liquid removal using the original pneumatic pump. The liquid in SVE-61 (and similarly SVE-65) is a highly viscous fluid. MWH will evaluate alternatives for removal of product from these locations and discuss the findings at a future meeting.

After the check valve failed in SVE-46, MWH evaluated the operation of the other DPE pumps. Fourteen of the 21 pumps are operational. Some reduced functionality was noted in the other seven and so they have been removed for servicing or replacement. The pumps will be reinstalled along with installation of secondary check valves at all DPE locations. Changes to the logic program have also been made to prevent similar occurrences in the future. The logic was revised so that pumps will be shut down in the event adequate flow is not observed through the DPE well headers.

Interaction with Community

MWH is coordinating a meeting with Mr. Howard Anderson to demonstrate the effectiveness of the noise shield housing installed over Blower ME-102. MWH will notify the project team when a meeting date and time have been scheduled.

Indoor air sampling was conducted at the residence at 1002 Reder Road on June 2-3. Three summa canisters were utilized during the 24-hour test. Two canisters were placed in the basement (the second canister was used as a backup in case there were problems with the first); the third placed outside and upwind of the home. Results are expected from the laboratory in about two weeks.

Lower Aquifer Investigation

Phase 2 of the Lower Aquifer Investigation is scheduled to begin on June 20. In advance of this event, MWH is coordinating access to railroad property. Clearing and grubbing will be performed prior to the event.

LOOK AHEAD

Field Events

- Lower Aquifer Event, Drilling – mobilization on June 20

Reports

- Monthly Status Report – June 9
- Quarterly Report, 3rd Quarter 2004 – Final Approval received June 1
- Quarterly Report, 4th Quarter 2004 – Agency comments received June 1
- HASP Update – June
- March 2005 Groundwater Monitoring Summary Report – June

Health &Safety Look Ahead

- During this time of year, bees and mosquitoes are a nuisance at the site.
- Discussed safety issues associated with the Lower Aquifer Investigation.

Future Meetings

- Monthly Site Meeting – Friday, July 1, 2005, 10 a.m. at MWH Chicago

CAD/PJV/CAS
J:\2090602 ACS PM\Meetings\Meeting Minutes 2005\ACS Meeting Minutes 06-03-05 pjv cas.doc

SITE MEETING AGENDA
JUNE 3, 2005
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA

MEETING DATE: Thursday, June 3, 2005

MEETING TIME: 10:00

MEETING LOCATION: MWH Chicago Office
175 West Jackson Blvd., Suite 1900

TOPICS:

SITE STATUS

- Health and Safety Summary
- GWTP Status
- ISVE Systems Status (incl. Thermal Oxidizers)
- Interaction with ACS Facility or Community

CURRENT ISSUES

- Lower Aquifer Groundwater Investigation
- SBPA DPE Pumps
- SBPA ISVE System Upgrades

MISCELLANEOUS

- Open

LOOK AHEAD

Field Events

- Post-Application Sampling for Second Full-scale Chemical Oxidation Treatment
- Soil Vapor Intrusion at 1002 Reder Road

Reports

- Monthly Status Report – June 9
- Quarterly Report, 3rd Quarter 2004 – Final Approval received June 1
- Quarterly Report, 4th Quarter 2004 – Agency comments received June 1
- ISVE Systems O&M Manual – Further comments received; MWH will respond via email
- HASP Update – to be submitted in June 2005
- March 2005 Groundwater Monitoring Summary Report – June 2005

Health & Safety Look Ahead

Future Meetings

CAD/CAS
J:\209\0602 ACS PM\Meetings\Meeting Agendas 2005\ACS Meeting Agenda 06-03-05.doc

Remedial Progress Report	May-05		Report Date: 6/2/2005

GWTP & Dewatering

The GWTP was operational for 30 days out of 31 days in May (97%).
Total Gallons treated = 791,016 gallons since 4/29/05 (28 days).

Ave. Flow Rate (gpm)	
4/15/05	Varies 25-40
4/22/05	Varies 25-40
4/29/05	Varies 25-40
5/13/05	Varies 25-40
5/20/05	Varies 25-40
5/27/05	Varies 25-40

*Red Number

Tables, Graphs & Figures
Table - Effluent Summary
Graphs - Off-Site Dewatering
Graphs - SBPA Dewatering

SBPA ISVE System

System was operational 3 out of 31 days in May (10%).
System monitoring was not conducted in May due to system shutdown.
The next monitoring event is scheduled for 6/8/05.

Tables, Graphs & Figures
Table - Sampling Data
Graph - Mass Extraction
Graph - Total VOC removal

Product Removal 5/19/05	
SVE-52	11.4 gal
SVE-53	6.4 gal
SVE-62	7.8 gal
SVE-72	5 gal
SVE-88	6 gal

36.6

Active Wells (23 of 46 total)	
SVE-43	SVE-67
SVE-45	SVE-68
SVE-47	SVE-70
SVE-48	SVE-71
SVE-55	SVE-74
SVE-56	SVE-75
SVE-57	SVE-76
SVE-58	SVE-83
SVE-59	SVE-85
SVE-60	SVE-86
SVE-63	SVE-87
SVE-64	

Off-Site ISVE System

System was operational 25 out of 31 days in May (81%).
System monitoring was conducted on 5/20/05
The next monitoring event is scheduled for 6/8/05.

Tables, Graphs & Figures
Table - Sampling Data
Graph - Mass Extraction
Graph - Total VOC removal

Active Wells (40 of 42 total)	
SVE-01	SVE-22
SVE-02	SVE-23
SVE-03	SVE-24
SVE-04	SVE-25
SVE-05	SVE-26
SVE-06	SVE-27
SVE-07	SVE-28
SVE-08	SVE-29
SVE-09	SVE-30
SVE-10	SVE-31
SVE-11	SVE-32
SVE-12	SVE-33
SVE-13	SVE-34
SVE-15	SVE-36
SVE-16	SVE-37
SVE-17	SVE-38
SVE-18	SVE-39
SVE-19	SVE-40
SVE-20	SVE-41
SVE-21	SVE-42

Comments

Data presented here is for informational purposes only. Not all data presented in this report has been validated.

Table
Summary of Effluent Analytical Results
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 93 2/15/2005	Month 93 3/15/2005	Month 94 4/11/2005	Effluent Limits	Lab Reporting Limits
pH	7.06	7.43 /J	7.25	6-9	none
TSS	NS	NS	1.00	30	10
BOD	NS	NS	< 2	30	2
Arsenic	NS	NS	11.4 /UB	50	3.4
Beryllium	NS	NS	2.7 B/UB	NE	0.2
Cadmium	NS	NS	2.6 B/B	4.1	0.3
Manganese	NS	NS	19.3 /B	NE	10
Mercury	NS	NS	ND	0.02 (w/DL = 0.64)	0.64
Selenium	NS	NS	ND	8.2	4.3
Thallium	NS	NS	3.5 B/UB	NE	5.7
Zinc	NS	NS	14.1 B/UB	411	1.2
Benzene	0.14 J	ND	ND /UJ	5	0.5
Acetone	2.4 J	2.2 JB/ 10 UBJ	1.9 J/J	6,800	3
2-Butanone	ND	ND	1.4 J/J	210	3
Chloromethane	ND	ND	ND /UJ	NE	0.5
1,4-Dichlorobenzene	ND	ND	ND /UJ	NE	0.5
1,1-Dichloroethane	ND	ND	ND /UJ	NE	0.5
cis-1,2-Dichloroethene	0.57	ND	0.62 /J	70	0.5
Ethylbenzene	0.14 J	ND	ND /UJ	34	0.5
Methylene chloride	1.0	1.2 /J	2.3 /J	5	0.6
Tetrachloroethene	0.16 J	ND	0.19 J/J	5	0.5
Trichloroethene	0.12 JB	ND	ND /UJ	5	0.5
Vinyl chloride	0.22 J	0.36 J/J	0.16 J/J	2	0.5
4-Methyl-2-pentanone	ND	ND	ND /UJ	15	3
bis (2-Chloroethyl) ether	NS	NS	ND	9.6	9.6
bis(2-Ethylhexyl) - phthalate	NS	NS	ND	6	6
4 - Methylphenol	NS	NS	ND	34	10
Isophorone	NS	NS	ND	50	10
Pentachlorophenol	NS	NS	ND	1	1
PCB/Aroclor-1016	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	NS	NS	ND	0.00056 (w/DL = 0.1 to 0.9)	0.5

Notes:

Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.
Metals, VOC, SVOC and PCB data is expressed in ug/L
ND = Not detected
NS = This analyte was not sampled or analyzed for
NE = No effluent limit established.
DL = Detection limit
* = Approved SW-846 method is incapable of achieving effluent limit.

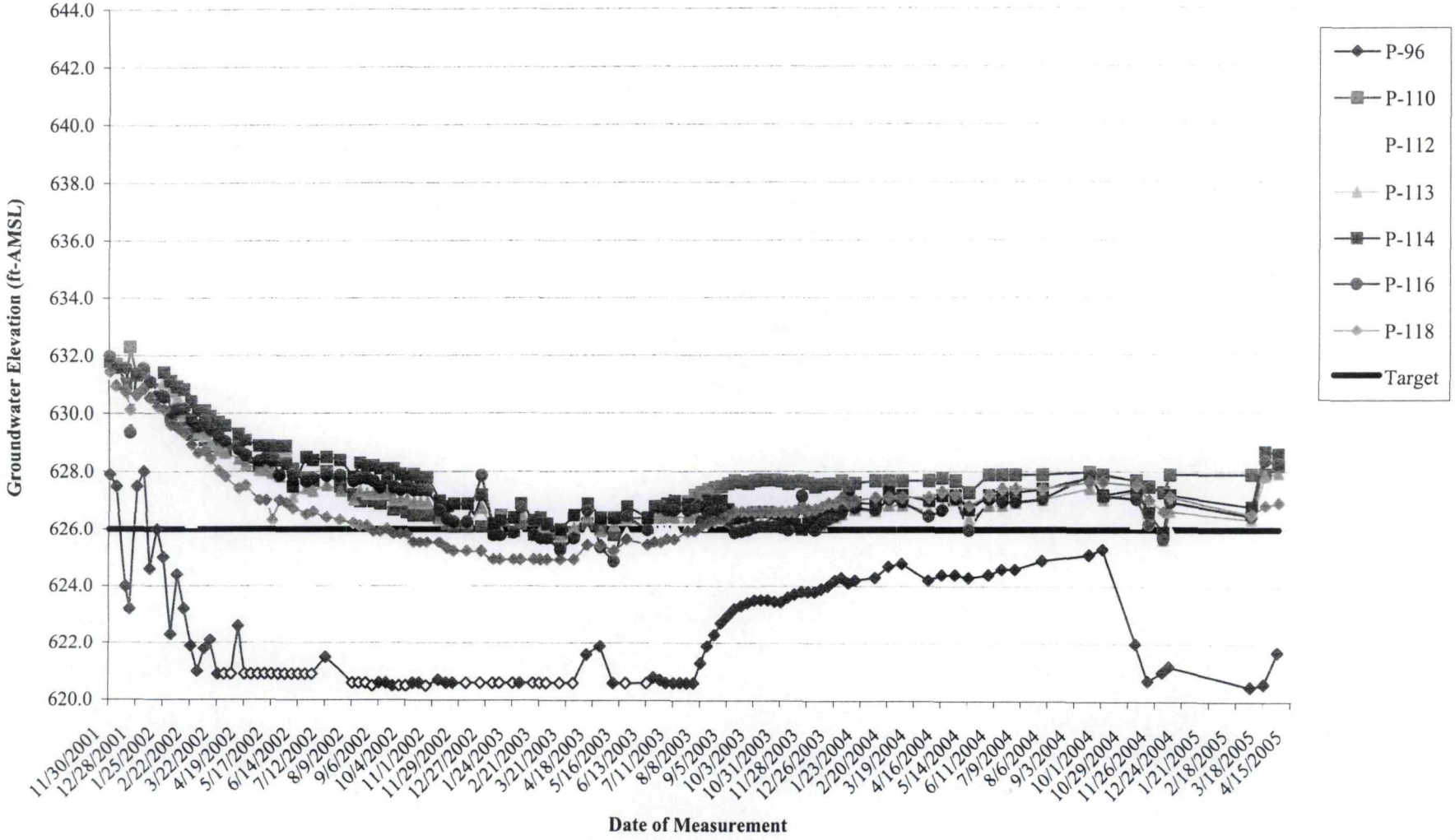
DRAFT VERSION
For Informational Purposes Only

Not all data presented here has been validated
Notes and suffix definitions have not been updated.

Suffix Definitions:

_/ = Data qualifier added by laboratory
/_ = Data qualifier added by data validator
J = Result is estimated
B = Compound is also detected in the blank
UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value
JB = Result is detected below the reporting limit and is an estimated concentration. The compound is also detected in the method blank resulting in a potential high bias
UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination
UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination, however the calibration was out of range. Therefore the concentration is estimated.

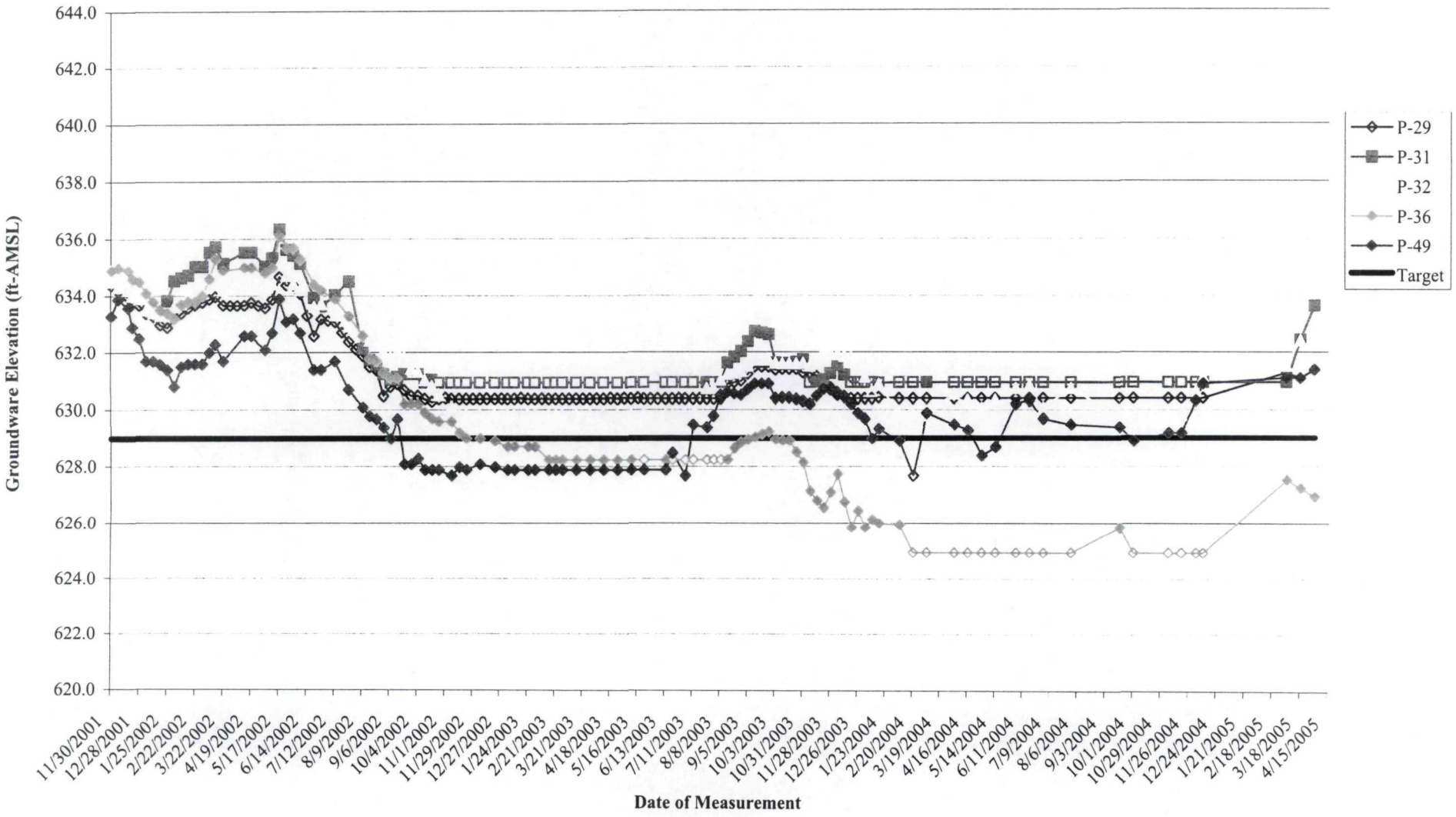
Figure 3
Off-Site Water Level Status - Piezometers
Groundwater Monitoring
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers
(data used for graphing purposes only). The bottom elevation of the piezometers may vary due to silting

ALC/jmf
J:/209/0603/0301/BWES and Dewatering Data/BWES Performance.2005.xls/Off-Site Chart

Figure 1
SBPA Water Level Status
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers (data used for graphing purposes only).
The bottom elevation of the piezometers may vary due to silting of the well or removal of silt.

ALC/jmf/CAD
J:/209/0603/0301/BWES Data/BWES Performance.2005.xls/On-S

Table 10
SBPA and Off-Site ISVE System Results
for Method TO-14 (VOCs) - April 2005
American Chemical Service
Griffith, Indiana

		Sampled 4/7/2005			
Compounds	**Units**	**SBPA ISVE**		**Off-Site ISVE**	
1,1,1-Trichloroethane	ppbv	46,000		35,000	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	ND	U	ND	U
1,1-Dichloroethane	ppbv	3,000		3,600	
1,1-Dichloroethene	ppbv	350		290	J/J
1,2-Dichloroethane	ppbv	280		1,100	
1,2-Dichloropropane	ppbv	240		230	J/J
2-Butanone (Methyl Ethyl Ketone)	ppbv	540	J/J	12,000	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	1,200		6,000	
Acetone	ppbv	890		14,000	
Benzene	ppbv	6,100		26,000	
Bromodichloromethane	ppbv	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	28.00	J/J	ND	U
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	53	J/J	ND	U
Chloroethane	ppbv	450		ND	U
Chloroform	ppbv	8,000		2,000	
Chloromethane	ppbv	59	J/J	ND	U
cis-1,2-Dichloroethene	ppbv	14,000		2,100	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	8,900		12,000	
m,p-Xylene	ppbv	34,000		49,000	
Methylene Chloride	ppbv	9,100		28,000	
o-Xylene	ppbv	14,000		17,000	
Styrene	ppbv	ND	U	870	
Tetrachloroethene	ppbv	18,000		21,000	
Toluene	ppbv	47,000		110,000	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	23,000		18,000	
Vinyl Chloride	ppbv	750		ND	U
Total	**ppbv**	**235,940**		**358,190**	
Total	**lb/hr**	**4.20**		**6.78**	

Notes:

_/ - Laboratory data qualifier

/_ - Data validation qualifier

NC - Not calculated

ND - Non-detect

ppbv - parts per billion volume

lb/hr - pounds per hour

3/17/05 VOCs in lb/hr calculated based on Offsite: 1550 scfm, 55 degrees Fahrenheit (3/9/05)

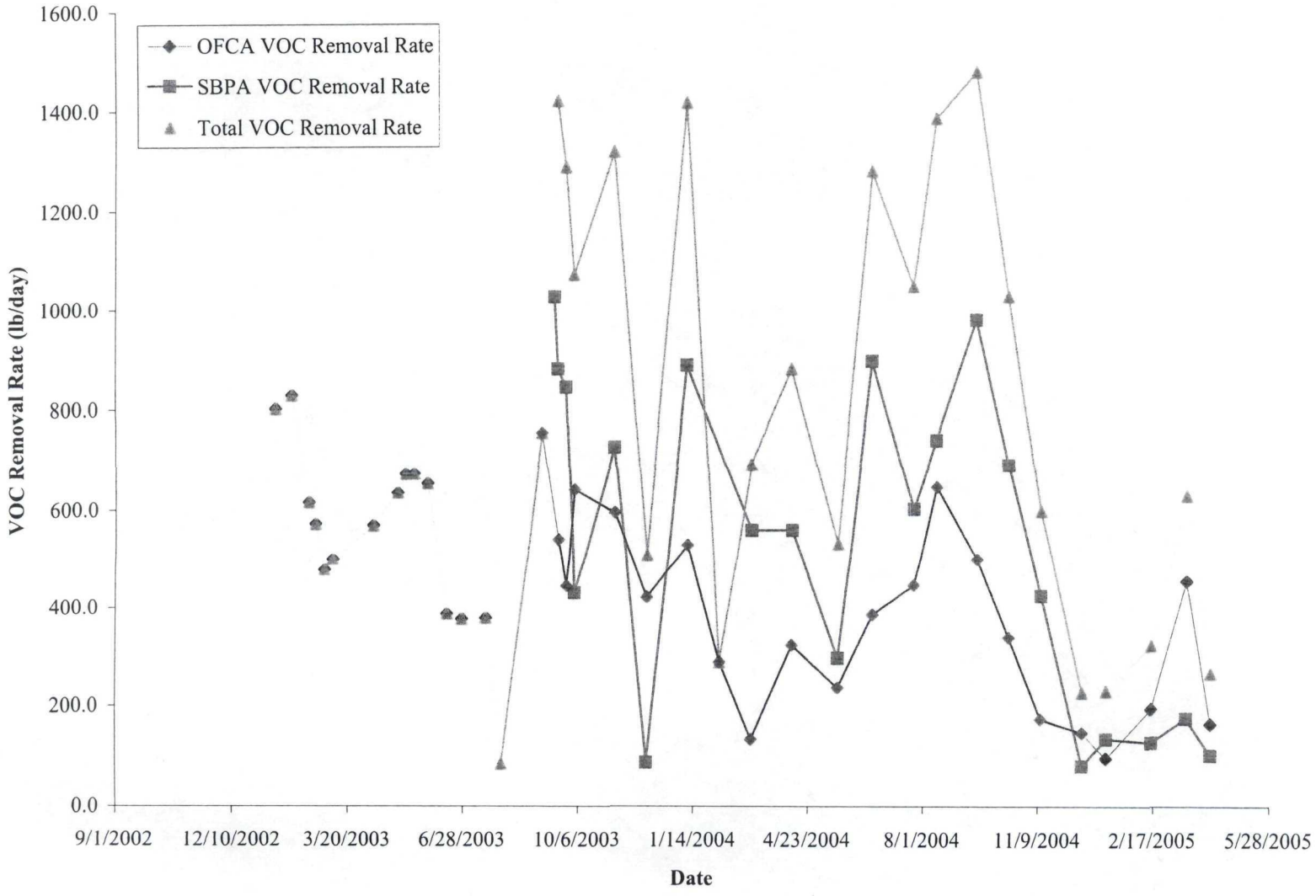
On-site: 1200 scfm, 40 degrees Fahrenheit (3/9/05)

Table 10
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - April 2005
American Chemical Service
Griffith, Indiana

		Sampled 4/7/2005			
Compounds	**Units**	**SBPA ISVE**		**OFF-Site ISVE**	
1,2,4-Trichlorobenzene	µg	ND	U	1 1	
1,2-Dichlorobenzene	µg	2 1		35	
1,3-Dichlorobenzene	µg	ND	U	ND	U
1,4-Dichlorobenzene	µg	ND	U	ND	U
2,4,5-Trichlorophenol	µg	ND	U	ND	U
2,4,6-Trichlorophenol	µg	ND	U	ND	U
2,4-Dichlorophenol	µg	ND	U	ND	U
2,4-Dimethylphenol	µg	ND	U	ND	U
2,4-Dinitrophenol	µg	ND	U	ND	U
2,4-Dinitrotoluene	µg	ND	U	ND	U
2,6-Dinitrotoluene	µg	ND	U	ND	U
2-Chloronaphthalene	µg	ND	U	ND	U
2-Chlorophenol	µg	ND	U	ND	U
2-Methylnaphthalene	µg	0.84	J/J	4 6	
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U
2-Nitroaniline	µg	ND	U	ND	U
2-Nitrophenol	µg	ND	U	ND	U
3,3'-Dichlorobenzidine	µg	ND	U	ND	U
3-Nitroaniline	µg	ND	U	ND	U
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U
4-Chloro-3-methylphenol	µg	ND	U	ND	U
4-Chloroaniline	µg	ND	U	ND	U
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U
4-Methylphenol/3-Methylphenol	µg	ND	U	2 2	J/J
4-Nitroaniline	µg	ND	U	ND	U
4-Nitrophenol	µg	ND	U	ND	U
Acenaphthene	µg	ND	U	ND	U
Acenaphthylene	µg	ND	U	ND	U
Anthracene	µg	ND	U	ND	U
Benzo(a)anthracene	µg	ND	U	ND	U
Benzo(a)pyrene	µg	ND	U	ND	U
Benzo(b)fluoranthene	µg	ND	U	ND	U
Benzo(g,h,i)perylene	µg	ND	U	ND	U
Benzo(k)fluoranthene	µg	ND	U	ND	U
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U
bis(2-Ethylhexyl)phthalate	µg	0.42	J/J	ND	U
Butylbenzylphthalate	µg	ND	U	ND	U
Chrysene	µg	ND	U	ND	U
Dibenz(a,h)anthracene	µg	ND	U	ND	U
Dibenzofuran	µg	ND	U	ND	U
Diethylphthalate	µg	0 33	J/J	0 49	J/J
Dimethylphthalate	µg	ND	U	ND	U
di-n-Butylphthalate	µg	0.31	J/J	0.39	J/J
Di-n-Octylphthalate	µg	ND	U	ND	U
Fluoranthene	µg	ND	U	ND	U
Fluorene	µg	ND	U	ND	U
Hexachlorobenzene	µg	ND	U	ND	U
Hexachlorobutadiene	µg	ND	U	2.3	
Hexachlorocyclopentadiene	µg	ND	U	0.33	J/J
Hexachloroethane	µg	ND	U	ND	U
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U
Isophorone	µg	0 34	J/J	20	
Naphthalene	µg	2 4		26	
Nitrobenzene	µg	ND	U	ND	U
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U
N-Nitrosodiphenylamine	µg	ND	U	ND	U
Pentachlorophenol	µg	ND	U	ND	U
Phenanthrene	µg	ND	U	ND	U
Phenol	µg	ND	U	ND	U
Pyrene	µg	ND	U	ND	U
Total	µg	**6.7**		**92.41**	

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect

VOC Removal Rate
American Chemical Services NPL Site, Griffith, IN



MBM/raa
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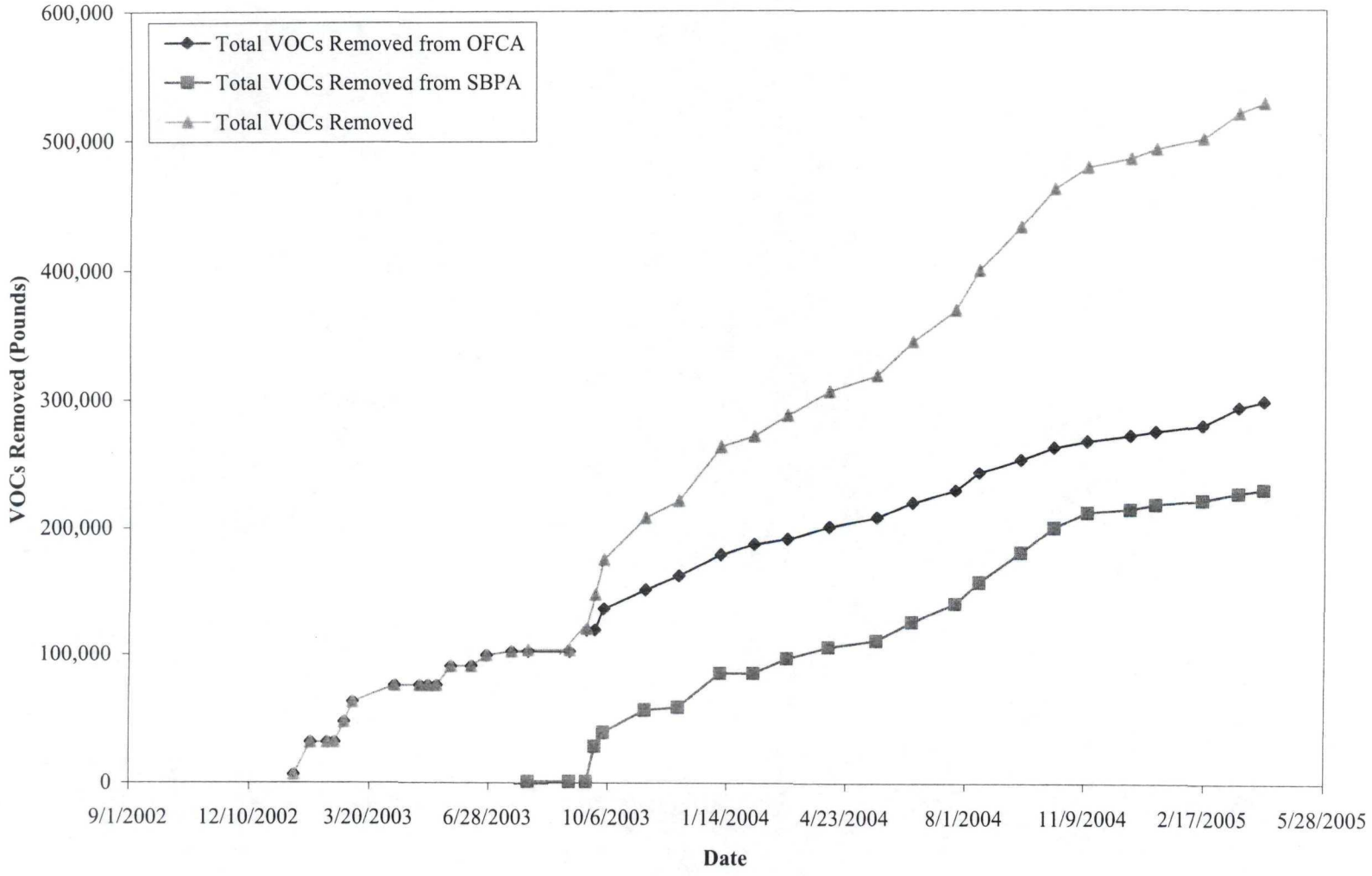
Total VOCs Removed
American Chemical Services NPL Site, Griffith, IN



MBM/raa
J:\209\0603\Remedial System Metrics\ISVE\ISVE Mass Removal.xls

10 May 05

1015 Arrive onsite
clear warm calm 68°F
Personnel onsite
Lee Cross MWH
Tim Kirkland Austgen
Larry Campbell BUSPC

1020 Spoke w/ Lee. GWTP running well.
- ~~Have~~ Had GAC changeout Yesterday. Plant running in recirculation mode till pH returns to normal. May restart discharge of treated water tomorrow.
- ISVE systems both ~~off during~~ June not pulling vapors from wells during recirculation opns. Thermox 2 processing vapors only from Tank T102
- MWH plans to conduct inspection of Thermox 1 to more fully check condition of interior coating on scrubber.
- Thermox units not pulling

Vapors from well fields because Spray ~~Nozzles~~ in scrubbers are clogged & need cleaning.

1030 Left site for day

(16)

20 May 05

1000 Arrive onsite
overcast, Calm, Cool 55°F
Personnel Onsite
Lee Orosz MWH
Tim Kirkland Austgen
Larry Campbell BVSPC

1005 Disc w/ Lee
- Plant running well @ 39 gpm
pumping from all sources
- Thermox 1 down because
of faulty natural gas regulator
replacement on order.
∴ SBPA ISVE not operating
- last week, MWH increased
dest. Temp of Thermox 2
from 1450°F to 1500°F
to compensate for 5 damaged
tubes in burner. Also now
operating both CFCA blowers ok
Operating at 2000 CFM
- Flitway onsite yesterday
to install larger fan in
ME102 noise abatement Enclosure
but had wrong size fan. Will return

1025 Left Site for day LM Campbell

(17)

1 June 05

1645 Arrive Onsite
Clear, Slight breeze, Warm 85°F
Personnel Onsite
Lee Orosz MWH
Kenny Doane PSA
Andy Wozesinski BCS
Chad Smith MWH
Tim Kirkland Austgen
Amy Clark MWH
Rich Marsiglio BCS
Prabhakar Kasibhanula IDEM
Noelle Brigham MWH
Larry Campbell BVSPC

1650 disc w/ Chad Smith, MWH
Sampled (GW) from all Temp.
Wells yesterday (*) Today MWH
+ BCS used Geoprobe to sample
soil & groundwater at 4 locations

1700 MWH took sampling canisters
to 1002 Keller Rd. to conduct
indoor air sampling. Adults were not home
So sampling delayed till tomorrow.

1730 Left Site for day

LM Campbell

(*) Fedex did not deliver to lab next day
May need to resample it Temp for high.

(18)

3 June 05

0745 Arrive onsite
Overcast, Calm, Cool 9C
Personnel Onsite
Lee Orosz MWH
Amy Clove "
Chad Smith "
Kenny Doane PSA
LM Campbell BVSPC
Tim Kirkland Austgen

0750 D/w Chad Smith. Indoor air Canisters were set out yesterday ~ 9 AM. Will collect later today - Misdelivered Samples from Temp. wells arrived at lab at sufficiently low temperature to not require resampling

0755 Lee said they pumped 48 gal product from SBPA DPE wells yesterday

0800 Photo 75-01 looking South at Scrubber 1 w/ access hatch open

0801 Photo 75-02 looking SE at interior of Scrubber 1 w/ deflector

LM Campbell

(19)

0802 Photo 75-03 looking SW at interior of Scrubber 01

0823 Photo 75-04 looking W at disassembled blower ME 102.

0817 Photo 75-05 looking S at PSA DPT Rig at location 8 on E side of Calfax Ave

0818 Photo 75-06 looking S at first Soil sample from location 8

0848 Photo 75-07 looking W at PSA backfilling hole @ loc. 8 w/ Bentonite

0853 Photo 75-08 looking SW at background outdoor air canister located SE of house at 1002 Rader Rd.

0857 Photo 75-09 ~~Photo~~ looking NE at the Summa Canisters in basement of house at 1002 Rader Rd. Chad noted one had not been opened to collect sample.

0900 PSA moved to locations on W side of Calfax Ave

1000 Const Mtg See pg 20 - 23

1045 mtg end

1115 MWH completed Soil sampling

1120 Photo 75-10 looking S at MWH & PSA cleaning up after completing Sampling

LM Campbell

1000 Construction Mtg

Personnel

Lee Orosz MWH

Chad Smith MWH

Prabhakar Kasarabada IDEM

Larry Campbell BVSPC

Pete Vogt MWH Phone

Chris Daly MWH "

Todd Lewis MWH "

H&S – No issues since last mtg. Various maint. tasks in GWTP & ISVE Systems. MWH ACS Site Project won internal MWH ACE Award for overall safety.

ChemOx – Post-application sampling started Tues 5/31 w/ well sampling. PSA Envir. mobed to site on Wed 6/1 to geoprobe sample soil & GW. Sampling completed Fri 6/3. Sampled 16 locations. No H&S issues with working near ~~[illegible]~~ Colfax Ave re traffic.

Indoor Air Quality – MWH attempted to conduct indoor air quality

Larry Campbell

sampling of residence at 1002 Raber Rd. but adults were not home on Wed 6/1 & Chad Smith deferred sampling until 9AM on Thur 6/2. Placed 2 Summa canisters in basement & 1 outside, SE of and upwind of house. Collected canisters at 9AM on Fri 6/3 – 24 hr collection. One of canisters in basement had not been turned on – so don't have a duplicate sample from interior of house. Canisters will be analyzed for VOCs & methane. Should have results in 2-3 wks. Residents were very cooperative.

GWTP – Operated 97% in May, pumping 971,000 gal at 25 to 42 gpm. Replaced GAC on May 9 – ran plant in recirculation mode for 2+ days until plt returned to normal.

SBPA ISVE – Thermal 1 – down most of May. Problems w/ main gas regulator (replaced), spray nozzles

Larry Campbell

Recirculation pump motor (ordered replacement motor). Cleaned interior & scrubbed & found some deterioration of new coating. No air sampling done this month

CFCA ISVE

Thermox 2 operated most of month OK - pulling vapors from 40 of 42 CFCA ISVE wells. Packing nut was fouled - so replaced w new packing. Old packing to be cleaned for future reuse. The recirculating pump was damaged by fouling material - it will be replaced.

Blower ME02 is not operating because of leaking seal. ME03 now operating.

Noise issue - When ME02 is back in operation, Mott will contact local neighbors to come to site to hear results of noise suppression housing.

SBPA DPE pumps - Mott checked all 21 DPE well pumps following failure of check valve last month. Found 14 pumps working OK but 7 require repair / replacement. Pumps removed from wells & stored in sturdy roll off box @ GWTP. When reinstall repaired pumps will add a 2nd check valve. Also changed programming to shut down system if insufficient flow.

Product removal - Mott will pump up to 48 gal product from 5 SBPA wells. Attempted to pump from SVE61 & SVE65, but product too viscous to pump. Will evaluate alternatives to collecting this material.

SBPA ISVE upgrade - PRP Comm. has approved concept. Mott to get prices & PRP approval

Look Ahead

Post application & indoor air sampling. Clearing for lower Agnes Inverse (6/20).

Hds - bees, wasps

1045 Mtg over

1130 left site for delay

Jim Campbell

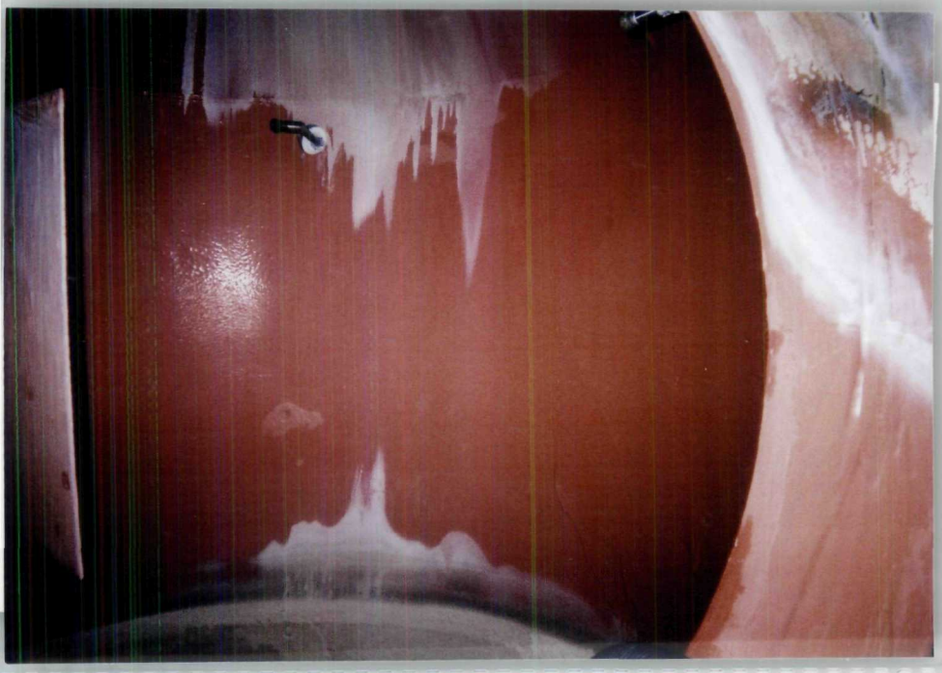
Jim Campbell

Roll 75, Photo # 1

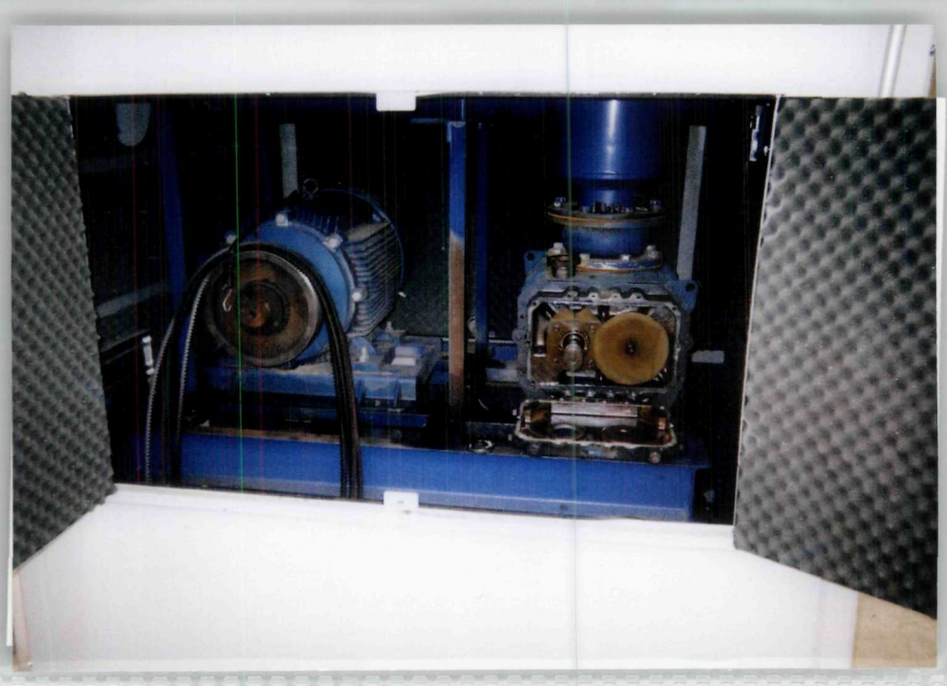
Did not develop

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #1
Date: 06-03-05 Time: 0800
Photographer: Larry Campbell
Description: Photo facing south showing thermox 1 scrubber with the access hatch removed.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #2
Date: 06-03-05 Time: 0801
Photographer: Larry Campbell
Description: Photo facing southeast showing interior of thermox 1 scrubber with deflector plate.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #3
Date: 06-03-05 Time: 0802
Photographer: Larry Campbell
Description: Photo facing southwest showing interior of thermox 1 scrubber.



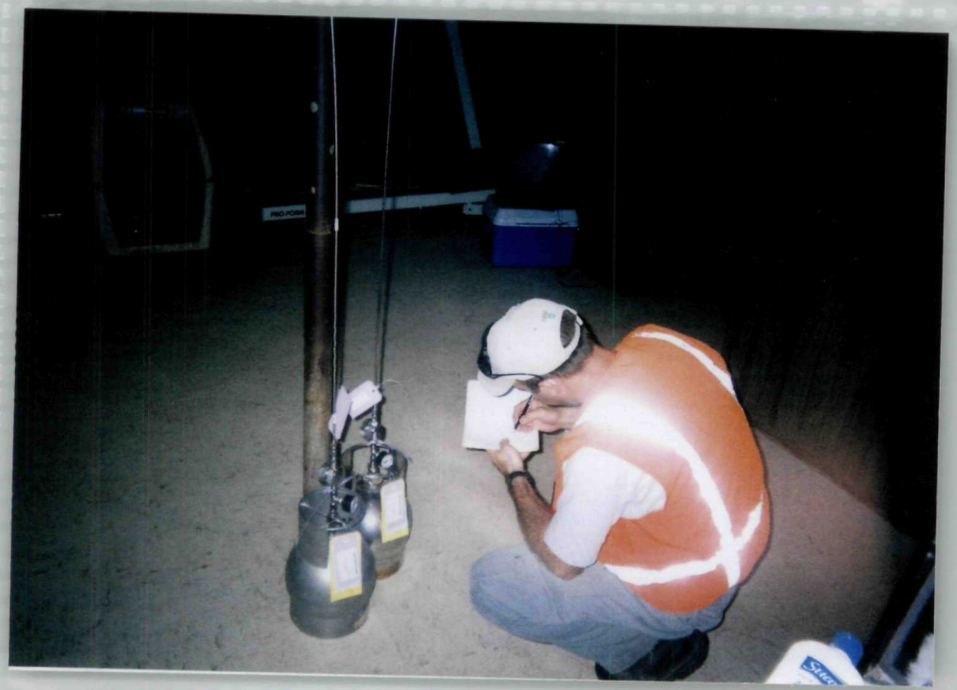
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #4
Date: 06-03-05 Time: 0803
Photographer: Larry Campbell
Description: Photo facing west showing disassembled blower ME102 because of leaking seal.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #5
Date: 06-03-05 Time: 0817
Photographer: Larry Campbell
Description: Photo facing south showing PSA Environmental DPT rig at location 8 on east side of Colfax Avenue preparing to collect post-application soil samples.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #6
Date: 06-03-05 Time: 0818
Photographer: Larry Campbell
Description: Photo facing south showing first soil sample from location 8.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #7
Date: 06-03-05 Time: 0848
Photographer: Larry Campbell
Description: Photo facing west showing PSA backfilling hole at location 8 with bentonite.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #8
Date: 06-03-05 Time: 0853
Photographer: Larry Campbell
Description: Photo facing southwest showing background outdoor summa canister located southeast of house at 1002 Reder Road.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #9
Date: 06-03-05 Time: 0857
Photographer: Larry Campbell
Description: Photo facing northeast showing two summa canisters in basement of house at 1002 Reder Road.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 75 Photo #10
Date: 06-03-05 Time: 1120
Photographer: Larry Campbell
Description: Photo facing south showing MWH and PSA cleaning up after completion of post-application sampling.